

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A computer implemented method for generating embedded code from a graphical model, the method comprising ~~the steps of~~:
prompting a user to specify at least one code generation goal from a plurality of code generation goals, the at least one code generation goal being used to generate for the embedded code from the graphical model in a graphical modeling environment;
changing parameters of the graphical model that are inconsistent with the at least one code generation goal; and
generating embedded code in accordance with a ~~compliant form for the specified the at least one~~ code generation goal.
2. (Canceled)
3. (Currently Amended) The method of claim 1, further comprising:
~~the step of~~ providing feedback to the user regarding the compliance of the graphical model with a selected condition.
4. (Original) The method of claim 3, wherein the user selects the selected condition through a user interface.
5. (Original) The method of claim 4, wherein the user interface displays a list of conditions to be checked, and prompts the user to select one or more of the conditions.
6. (Currently Amended) The method of claim 3, wherein ~~the step of~~ providing feedback to the user regarding the compliance of the graphical model with ~~[[a]]~~ the selected condition further comprises:
displaying a hyperlink ~~for linking~~ that links the selected condition to an object of the graphical model that does not comply with the selected condition.

7. (Currently Amended) The method of claim 3, further comprising: ~~the step of~~ modifying an object of the graphical model that does not comply with the selected condition.
8. (Currently Amended) The method of claim 7, wherein ~~the step of~~ modifying further comprises:
identifying the object; and
prompting the user to manually modify a parameter of the object.
9. (Currently Amended) The method of claim 7, wherein ~~the step of~~ modifying further comprises:
automatically modifying a parameter of the graphical model to comply with the selected condition.
10. (Original) The method of claim 1, wherein the graphical model is a block diagram.
11. (Original) The method of claim 1, wherein each code generation goal corresponds to a general code generation goal.
12. (Currently Amended) The method of claim 11, further comprising: ~~the step of~~ prompting the user to specify at least one detailed code generation goal for each specified general code generation goal.
13. (Currently Amended) The method of claim 12, further comprising:
configuring the graphical model to comply with each detailed code generation goal.
14. (Currently Amended) A computer-implemented method of preparing a graphical model for embedded code generation, the method comprising ~~the steps of~~:

~~displaying a user interface for prompting a user to specify one or more code generation goals; and~~

acquiring a code generation goal, the code generation goal being used to generate embedded code from the graphical model;

~~automatically changing parameters of the graphical model that are inconsistent with the code generation goal goals specified by the user; and~~

generating embedded code in accordance with the code generation goal.

15. (Currently Amended) The method of claim 14, further comprising: ~~the step of~~ identifying a condition that does not comply with the code generation goals ~~specified by the user.~~

16. (Currently Amended) A computer-implemented method of preparing a graphical model for embedded code generation, the method comprising ~~the steps of:~~

~~displaying a graphical user interface through which a user can specify~~ acquiring at least one code generation goal, the acquired at least one code generation goal being used to generate for the embedded code to be generated from the graphical model; and

~~in response to a user specifying a code generation goal, providing feedback to the user~~ displaying information regarding compliance of the graphical model with said the acquired at least one code generation goal;

changing parameters of the graphical model that are inconsistent with the acquired at least one code generation goal; and

generating embedded code in accordance with the acquired at least one code generation goal.

17. (Canceled)

18. (Currently Amended) The method of claim 16, wherein displaying information ~~further the step of providing feedback~~ comprises:
acquiring at least one condition; and
displaying information regarding compliance of the graphical model with the acquired at
least one indicating to the user whether the graphical model complies with a selected condition.

19. (Currently Amended) The method of claim 18, wherein the ~~user selects the selected~~
condition is acquired from a user through ~~the~~ a user interface.

20. (Original) The method of claim 19, wherein the user interface displays a list of
conditions to be checked, and prompts the user to select one or more of the conditions.

21. (Currently Amended) The method of claim 18, wherein displaying information
regarding compliance of the step of indicating to the user whether the graphical model with the
acquired at least one condition ~~complies with a selected condition~~ comprises:
displaying a hyperlink ~~for linking that links~~ the selected condition to an object of the
graphical model that does not comply with the ~~selected~~ acquired condition.

22. (Currently Amended) The method of claim 18, further comprising: ~~the step of~~
modifying an object of the graphical model that does not comply with the ~~selected~~ acquired
condition.

23. (Currently Amended) The method of claim 22, wherein ~~the step of~~ modifying
comprises:
identifying the object and prompting the user to manually modify a parameter of the object.

24. (Currently Amended) The method of claim 22, wherein ~~the step of~~ modifying
comprises:

automatically modifying a parameter of the graphical model to comply with the selected acquired condition.

25. (Original) The method of claim 16, wherein the graphical model is a block diagram.

26. (Canceled)

27. (Previously Presented) The method of claim 16, wherein each code generation goal corresponds to a general code generation goal.

28. (Currently Amended) The method of claim 27, further comprising: ~~the step of~~ prompting the user to specify at least one detailed code generation goal for each specified general code generation goal.

29. (Currently Amended) The method of claim 28, further comprising: ~~the step of~~ configuring the graphical model to comply with each detailed code generation goal.

30. (Currently Amended) In a graphical modeling environment, a computer-readable medium holding computer-executable instructions ~~for a method, comprising the steps of the~~ medium holding:

one or more instructions for displaying a graphical user interface through which a user can specify acquiring at least one code generation goal, the acquired at least one code generation goal being used to generate embedded code for code to be generated from the graphical model; and

one or more instructions for in response to a user specifying a code generation goal, providing feedback to the user displaying information regarding compliance of the graphical model with said the acquired at least one code generation goal;

one or more instructions for changing parameters of the graphical model that are inconsistent with the acquired at least one code generation goal; and

one or more instructions for generating embedded code in accordance with the acquired at least one code generation goal.

31. (Currently Amended) In a graphical modeling environment, a computer-readable medium holding computer-executable instructions for a method, comprising the steps of the medium holding:

~~displaying a user interface for prompting a user to specify one or more code generation goals; and~~

one or more instructions for acquiring a code generation goal, the code generation goal being used to generate embedded code from the graphical model;

one or more instructions for automatically changing parameters of the graphical model that are inconsistent with the code generation goal ~~goals specified by the user; and~~

one or more instructions for generating embedded code in accordance with the code generation goal.

32. (Currently Amended) In a graphical modeling environment, a computer-readable medium holding computer-executable instructions for a method, comprising the steps of the medium holding:

one or more instructions for prompting a user to specify at least one code generation goal from a plurality of code generation goals, the at least one code generation goal being used to generate for the embedded code from the graphical model in a graphical modeling environment;

one or more instructions for changing parameters of the graphical model that are inconsistent with the at least one code generation goal; and

one or more instructions for generating embedded code in accordance with a ~~compliant~~ form for the specified the at least one code generation goal.

33. (Currently Amended) An apparatus comprising:
at least one processor;

a memory coupled to the at least one processor; and
a computer program residing in the memory and being executed by the at least one processor, wherein the computer program includes a wizard for guiding a user through a process for preparing a graphical model for a code generation process for creating code based on the graphical model and at least one code generation goal ~~specified by the user~~, wherein the wizard configures the graphical model based on the at least one code generation goal, wherein the computer program generates code in compliance with the at least one code generation goal.

34. (Canceled)

35. (Canceled)

36. (Canceled)

37. (Currently Amended) The apparatus of claim 33, wherein the wizard prompts the user to select one or more conditions to be checked in the graphical model.

38. (Previous Presented) The apparatus of claim 37, wherein the wizard identifies objects in the graphical model that do not comply with the selected conditions.

39. (Previous Presented) The apparatus of claim 37, wherein the wizard modifies objects in the graphical model that do not comply with the selected conditions.